

REMARKS

Claims 1-30 are pending in this application. By this Amendment, claims 1, 3, 4, 13, 17 and 18 are amended, and claims 20-30 are added. Claims 1, 13, 17 and 18 are amended to even more clearly distinguish over the applied references. Claims 3 and 4 are amended for clarification purposes only and not to overcome prior art. Reconsideration based on the above amendments and following remarks is respectfully requested.

I. **PENDING CLAIMS ARE PATENTABLE OVER THE APPLIED ART**

The Office Action rejects claims 1-4, 6-8, 10, 11, 13 and 14 under 35 U.S.C. §103(a) over U.S. Patent No. 6,248,633 to Ogura et al. (hereinafter "Ogura 633") in view of U.S. Patent No. 5,883,001 to Jin (hereinafter "Jin") and further in view of U.S. Patent No. 6,388,293 to Ogura et al (hereinafter "Ogura 293"); rejects claims 5, 12 and 15 under 35 U.S.C. §103(a) over Ogura 633 in view of Jin and Ogura 293 and further in view of U.S. Patent No. 6,091,101 to Wang; rejects claims 9 and 16-18 under 35 U.S.C. §103(a) over Ogura 633 in view of Jin and Ogura 293 and further in view of U.S. Patent No. 4,372,031 to Tsaur; and rejects claim 19 under 35 U.S.C. §103(a) over Ogura 633 in view of Jin, Ogura 293 and Tsaur, and further in view of Wang. The rejections are respectfully traversed.

Ogura 633 in combination with Jin and Ogura 293 does not teach or suggest a semiconductor integrated circuit device, comprising, *inter alia*, a pair of the first and second control gates, adjacent each other in a second direction which intersects the first direction, and which are connected to each other through a pad-shaped common contact section, the pair of first and second control gates also being connected to an upper interconnect layer through a conductive layer disposed in a contact hole and formed over the pad-shaped common contact section, as set forth in independent claims 1 and 18, and similarly recited in independent claims 13 and 17.

The Office Action asserts that Ogura 633, in Figs. 4A-4G and 7A, discloses the

features of claim 1 and 13, including a common contact section for a pair of the first and second control gates [240], except for the common contact section being pad-shaped. The Office Action asserts that this feature is taught in Jin, at col. 1, lines 25-30, and Ogura 293, at col. 26, lines 48-53. Applicants respectfully disagree with the Office Action's interpretation of Ogura 633, Jin and Ogura 293, and their application to claims 1, 13, 17 and 18.

In Ogura 633, because the two sidewall spacer gates 240 facing each other have an n⁺ junction 204 interposed inbetween, the gates 240 are not electrically connected with each other, as discussed below.

For example, in Ogura 633, a silicon oxide layer 234 is provided between a sidewall spacer gate 240 and a word gate 245 (see Ogura 633, at col. 4, lines 51-54). An ONO layer 230 is provided under the sidewall spacer gates 240 (See Ogura 633, at col. 5, lines 25-27, and Fig. 4C). A sidewall oxide spacer 233 and an oxide and/or nitride layer 235 are provided between the sidewall spacer gate 240 and a silicide layer 241 formed over the n⁺ junction 204 (see Ogura 633, at col. 5, lines 29-51 and lines 55-56, and Fig. 4D). The silicide layer 241 formed over the sidewall spacer gate 240 is covered with the oxide and/or nitride layer 235 (see Ogura 633, at col. 5, lines 55-56). Thus, because in Ogura 633, the sidewall spacer gate 240 is covered with insulating materials, Ogura 633, in Fig. 4E, fails to disclose or suggest a common contact section.

Further, Ogura 633, in Fig. 7A, fails to disclose or suggest a common contact section. Ogura 633, throughout its entire specification, is silent regarding any description or explanation of Fig. 7A. In Fig. 7A, a CG1 (supposed to be a control gate line) is electrically connected with two control gates CG facing each other with a diffusion interposed inbetween. However, Applicants respectfully submit that it is not at all apparent from reading the schematic diagram shown in Fig. 7A, that Ogura 633 discloses, teaches or suggests that a common contact section is formed.

Moreover, Ogura 633 in combination with Jin and Ogura 293 does not teach or suggest first and second control gates...connected to each other through a pad-shaped common contact section, the pair of first and second control gates also being connected to an upper interconnect layer through a conductive layer disposed in a contact hole and formed over the pad-shaped common contact section, as set forth in independent claims 1 and 18, and similarly recited in independent claims 13 and 17. Support for these features is found in the specification, at least at page 12, line 14 to page 13, line 12.

The metal contact pad 23 in Fig. 1 of Jin has nothing to do with a common contact section between adjacent control gates. Furthermore, Ogura 293, at col. 26, lines 48-53, discloses that a connection-pad shaped photoresist is formed prior to polysilicon etching in order to connect a control line to a peripheral circuit. As with the contact pad in Jin, the connection-pad shaped photoresist in Ogura 293 has nothing to do with a common contact section between adjacent control gates.

Neither Wang nor Tsaor makes up for the deficiencies of Ogura 633, Jin and Ogura 293.

Applicants respectfully submit that independent claims 1, 13, 17 and 18 are patentable over the applied art. Claims 2-12, 14-16 and 19, which depend from claims 1, 13 and 18, respectively, are likewise patentable over the applied art for at least the reasons discussed above. Withdrawal of the rejections to claims 1-19 under 35 U.S.C. §103(a) is respectfully requested.

New claim 20, which depends from independent claim 13, recites additional features of the invention that are similar to those of claim 3. Support for these features is found in the specification, at least at page 12, lines 12-16.

New claims 21-30 recite additional features of the invention. Support for these features is found throughout the original specification.

Applicants respectfully submit that new claims 20-30 are patentable over the applied art for at least the reasons discussed above.

II. CONCLUSION

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-30 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff
Registration No. 27,075

George P. Simion
Registration No. 47,089

JAO:GPS/jam

Attachments:

Petition for Extension of Time
Amendment Transmittal

Date: March 5, 2004

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461
--